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continuation of application Serial No. 07/647,214, filed January 28, 1991 (now abandoned), which is a continuation of application Serial No. 07/494,857, filed March 14, 1990 (now abandoned), which is a continuation of application Serial No. 07/273,635, filed November 18, 1988 (now abandoned), which is a continuation of application Serial No. 07/771,248, filed August 30, 1985 (now abandoned).

BACKGROUND OF THE INVENTION --

Page 1, line 4, delete "The" and insert therefor --This--; line 18, after "Subsequently", insert a comma; and delete "have been" and insert therefor --were--; line 24, after "84 23659" insert a comma;

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--SUMMARY OF THE INVENTION--

between lines 27 and 28, insert:

line 29, delete "should" and insert therefor

--are--; and delete "also be";

/line 30, after "viruses" insert a comma;

line 31, delete ")" and insert therefor --or "Human

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Immunodeficiency Virus Type 1" or simply "HIV-1"--;

/line 31, after "but also" insert --new means

that--; and

line 33, delete "DNA" and insert therefor --RNA--.

Page 2, line 13, after "Finally" insert a comma; and

/line 16, delete "syndroms" and insert therefor

--syndromes--.

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page 3, line 22, delete "whole-DNA" and insert therefor
--whole DNA--;
            /line 23, delete "nucelotidie" and insert therefor
--nucleotide--;
            line 24, delete "fig." and insert therefor
--Figs.--; and
             between lines 27 and 28, insert:
             --BRIEF DESCRIPTION OF THE DRAWINGS --.
     Page 4, line 4, delete "nucleotidic" and insert therefor
--nucleotide--;
           /line 5, delete "peptidie" and insert therefor
--peptide--;
             Aine 7, delete "nucleotidie" and insert therefor
 --nucleotide--;
             /line 9, delete "enveloppe" and insert therefor
 --envelope--;
             /line 10, delete "peptidic" and insert therefor
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--peptide--;

 $/\!\!$ line 11, delete "responds" and insert therefor

--respond--;

between lines 11 and 12, insert:

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--DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS --

/line 13, delete "was" and insert therefor --were--;

/line 20, delete "the" and insert therefor -- The--;

line 26, delete "SmaI" and insert therefor

--<u>Sma</u>I--; and

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/line 27, delete "T".
   /Page 5, line 12, delete "Hind III" and insert therefor
--HindIII--; and
            /_{\text{line }13}, delete "this" and insert therefor
--This--.
    Page 7, line 6, delete "Sanger et al (Sanger" and insert
therefor -- Sanger et al. Sanger--;
            /line 8, delete "the" and insert therefor -- The --;
           /line 10, after "(1983" insert --)--;
            Time 18, delete "nucleotidie" and insert therefor
--nucleotide--;
            /line 20, delete "Hind III" and insert therefor
--HindIII--;
            /line 21, delete "AAG. ." and insert therefor
--AAG . . .--;
            /line 25, delete "I.e." and insert therefor -- That
is,--;
              vine 28, delete "tidic" and insert therefor
--tide--;
             Jine 29, delete "aminoacid" and insert therefor
 --amino acid--; and
             /line 30, delete "at" and insert therefor --of--.
    /Page 8, line 19, delete "nucleotidic" and insert therefor
 --nucleotide--; after "4" insert a comma;
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\gamma_{	ext{line}} 22, delete "theoritical" and insert therefor
-- theoretical -- ; delete "all over" and insert therefor -- over
all--;
            line 23, delete "successives" and insert therefor
--successive--; delete "nucleotidic" and insert therefor
--nucleotide--;
            /line 28, after "fig. 2", delete ")"; and
            line 30, delete "nucleotidic" and insert therefor
--nucleotide--.
     Page 9, lines 3 and 5, delete "nucleotidic" and insert
therefor --nucleotide--;
            /line 8, delete "aminoacid" and insert therefor
 --amino acid-7;
             /line 14, delete "aminoacid" and insert therefor
 --amino acid--;
              /line 15, delete "nucleotidic" and insert therefor
 --nucleotide--;
              /line 19, delete "aminoacid" and insert therefor
 --amino acid-7; and
              /line 22, delete "aminoacids" and insert therefor
 --amino acids--.
      /Page 10, line 5, delete "nucleotidic" and insert therefor
  --nucleotide--;
               /line 6, delete "nucleotidic" and insert therefor
  --nucleotide--;
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line 15, delete "nucleotidic" and insert therefor
--nucleotide--;
            /line 17, delete "idic" and insert therefor
--ide--;
             /line 18, delete "polypeptidic" and insert therefor
--polypeptide--;
              Aine 22, delete "th" and insert therefor --the--;
             /line 23, delete "feature" and insert therefor
--features--;
              /line 26, after "18" insert a comma;
              /line 28, after "difficulties" delete the period;
              /line 29, after "13" change the period to a comma;
               line 30, after "15" delete the period and insert
therefor a comma and;
               /line 32, after "Thus" insert a comma; after
"instance" insert a comma; and
              / line 36, after "words" insert a comma.
     Page 11, line 6, delete "etc..." and insert therefore
--etc.--;
              /line 10, delete "reference" and insert therefor
--Reference--;
              line 12, delete "aminoacid" and insert therefor
 --amino acid--;
              hine 14, delete "aminoacid" and insert therefor
 --amino acid--;
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/ine 15, after "Thus" insert a comma; delete "in"
and insert therefor --is--;
             fine 19, delete "hydrophylic" and insert therefor
--hydrophilic--;
             /line 22, after "Consequently" insert a comma;
             line 26, delete "env-proteins" and insert therefor
--env proteins--;
              line 27, delete "aminoacid" and insert therefor
--amino acid-
               line 28, delete "aminoacids" and insert therefor
--amino acids--;
             /line 30, delete ")" and insert therefor a comma;
              /line 31, after "extend" insert a comma; and
              J_{
m line} 32, after "respectively" insert a comma.
    \int Page 12, line 4, delete "they" and insert therefor
 --They--; and
               line 9, delete "aminoacids" and insert therefor
 --amino acids--.
     Page 13, line 32, delete "examplified" and insert therefor
 --exemplified--;
                line 33, delete "reference is for instance" and
 insert therfore -- Reference is, for instance, --; and
              /line 36, before "calcium" insert --such as--.
      /Page 14, line 3, after "yeast" delete "-";
               J_{	exttt{line}} 7, delete "Recombinant" and insert therefor
  --Recombinants--;
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/line 21, delete "antihemophylic" and insert
therefore --antihemophilic--; after "factors" insert a comma;
             f_{	ext{line}} 26, delete "said", after "support" insert a
comma;
             hine 27, after "virion" insert a comma; and
             /line 35, after "symptoms" delete ",".
    /Page 15, line 3, delete "comprise" and insert therefor
--comprises--;
              Aine 6, after "tissues," insert --and--;
              /line 11, delete "evolutionnary" and insert
therefor --evolutionary--;
              /line 14, after "non" insert -- - --;
             /line 15, after "can" insert --also--;
              /line 16, delete "also";
              /line 30, after "Conversely" insert a comma; and
              /line 34, after "antibodies" insert a comma.
     /Page 16, line 1, after "invention" insert a comma;
              / line 6, after "Thus" insert a comma;
               Aine 12, change "above mentioned" to --above-
 mentioned --;
               line 14, after "Finally" insert a comma;
               Aine 17, after "oligopeptides" insert a comma;
               Aine 18, delete "pharmaceutical" and insert
 therefor --pharmaceutically--;
               /line 19, after "Preferably" insert a comma;
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/line 21, delete "aminoacid" and insert therefor
            --amino acid--;
                          /line 22, delete "for" and insert therefor
            --from--; delete "genomas" and insert therefor --genomes--;
                         /line 30, after "host" insert a comma;
                          line 32, after "clarity" insert a comma; and
                          line 33, delete "reference" and insert therefor
            --Reference--.
                 Page 17, line 2, delete "genoma" and insert therefor
             --genome--;
                           /line 3, after "Finally" insert a comma;
                          J_{
m line} 6, after "Particularly" insert a comma; and
                           /line 10, after "defined" delete ", of a".
                  Page 20, line 3, after "virus" insert - , which has been
             designated Human Immunodeficiency Virus Type 1 (HIV-1)--.
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             IN THE CLAIMS:
            Please cancel claims 1-10 and add the following new claims.
                        A nucleotide sequende of Human Immunodeficiency Virus
             Type 1 (HIV-1), wherein the Mucleotide sequence is free of
             particles of said virus and the sequence is selected from the
             group consisting of:
                        (a) the sequence encoding ORF-Q comprising the
              following nucleotides;
                                                                             4530
                                                                 4520
                                                    4510
                                       4500
                           4490
              4480
                                                                       GATGGCAGGT
                    CAAGAAGAAA AGCAAAGATC ATTAGGGATT
                                                          ATGGAAAACA
               TGC
                                                                       4580
                                                          4570
                                              4560
                                  550
                    4540
                           TGGCAAGTAG ACAGGATGAG GATTAGAACA
                                                                TGGAAAAGTT
    . HENDERSON
              GATGATTGTG
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  & DUNNER
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